



Utility Rate Setting

**Kitsap-Olympic
Local Government
Infrastructure Academy**



Angie Sanchez Virnoche
Principal

November 20, 2014



You've Seen the Headlines

Poulsbo's water rates will rise By Richard Oxley.
North Kitsap Herald Reporter.
Nov. 7, 2014.
Poulsbo's City Council got some hard numbers Nov. 5 on where water rates could go. A water rate study ...suggests two rate hikes: in

Longview council hears more water complaints, raises rates By Brooks Johnson
Longview Daily News
Nov. 6, 2014
It's well-established how many Longview residents feel their water...Longview Council chamber Thursday night as a full 90 minutes were devoted to complaints about water quality...

Tacoma utility increases proposed at city budget meeting By Kate Martin.
The News Tribune.
Oct. 14, 2014
Directors of several Tacoma utilities proposed budget plan to Tacoma City Council that includes increases in utilities bills coming in the next year...

City of Kalama staff recommends raising...sewer / water rates By Lauri Kronebusch
Longview Daily News. Nov. 6, 2014.
City staff is recommending an array of sewer and water rate increases that would add \$5.51 to the average

Port Angeles City Council rejects utility rate hikes but will reconsider issue...
Peninsula Daily News. Sep. 23, 2014
Council members will consider proposed increases in utility rates and a decision after meeting again next week...The proposed 2 percent

Chehalis Water, Wastewater and Stormwater Rates to Increase
Centralia Chronical.
Nov. 5, 2014. As of Nov. 1, Chehalis residents saw an increase in water, wastewater and stormwater rates on

Sequim City Council approves utility fees restructuring for water, sewer customers
Columbia Daily News. Oct. 15, 2014
A split Sequim City Council gave Public Utilities Commission the go-ahead to increase the fee for the city's sewer

Vancouver hikes property tax, utility rates By Stephanie Rice
The Columbian.
Nov. 4, 2014
The Vancouver City Council voted Monday in favor of property tax levy and utility rate increases....Utility rate increases were passed unanimously. As an example of what the increases will mean for residents, the owner of a home with an assessed value of \$200,000 whose utility bills average for a family will pay an additional \$32.84 next year in city property taxes and utilities...

Water rates surging across the nation

While most Americans worry about gas and heating oil prices, water rates have surged in the past dozen years, according to a USA TODAY study of 100 municipalities. Prices at least doubled in more than a quarter of the locations and even tripled in a few.

sewer plant in 2005, said at the state's behest, City Clerk/Treasurer Coni McMaster said Thursday...

increase in a monthly water bill. Residential customers outside of city limits will see an increase of about \$17 per bill...



Why Are Rate Studies Important?

- Helps to maintain the long-term health and integrity of the utility system
- Quantifies policies, priorities, and initiatives
- Tells the “true” cost of providing service
- Tracks cost information
- Evaluates equity between customer groups
- Communicates financial decisions and their impact
- Management tool



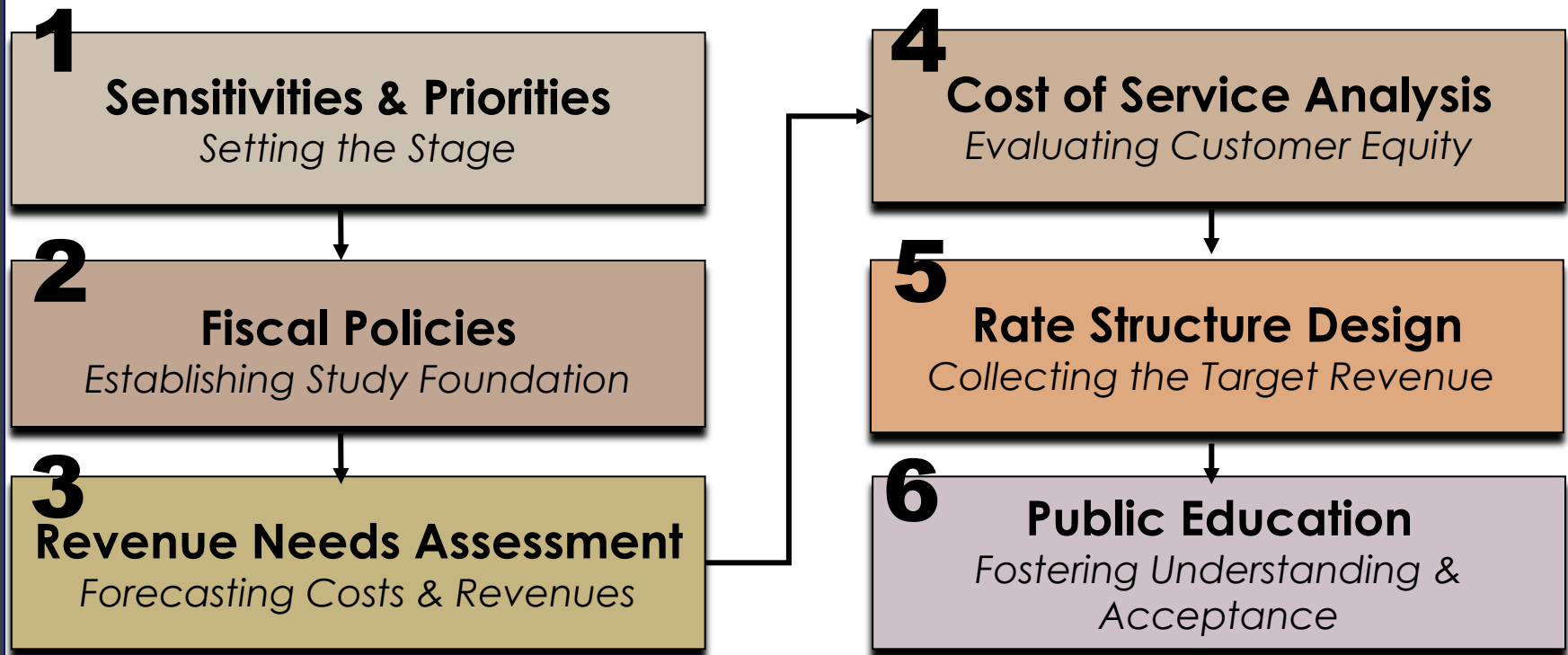
A Successful Rate Study is...

- A blend of information and expertise from ALL departments:
 - Finance
 - Engineering
 - Customer Service
 - Administration

.....**NOT** simply just a
financial exercise!



Key Rate Study Steps



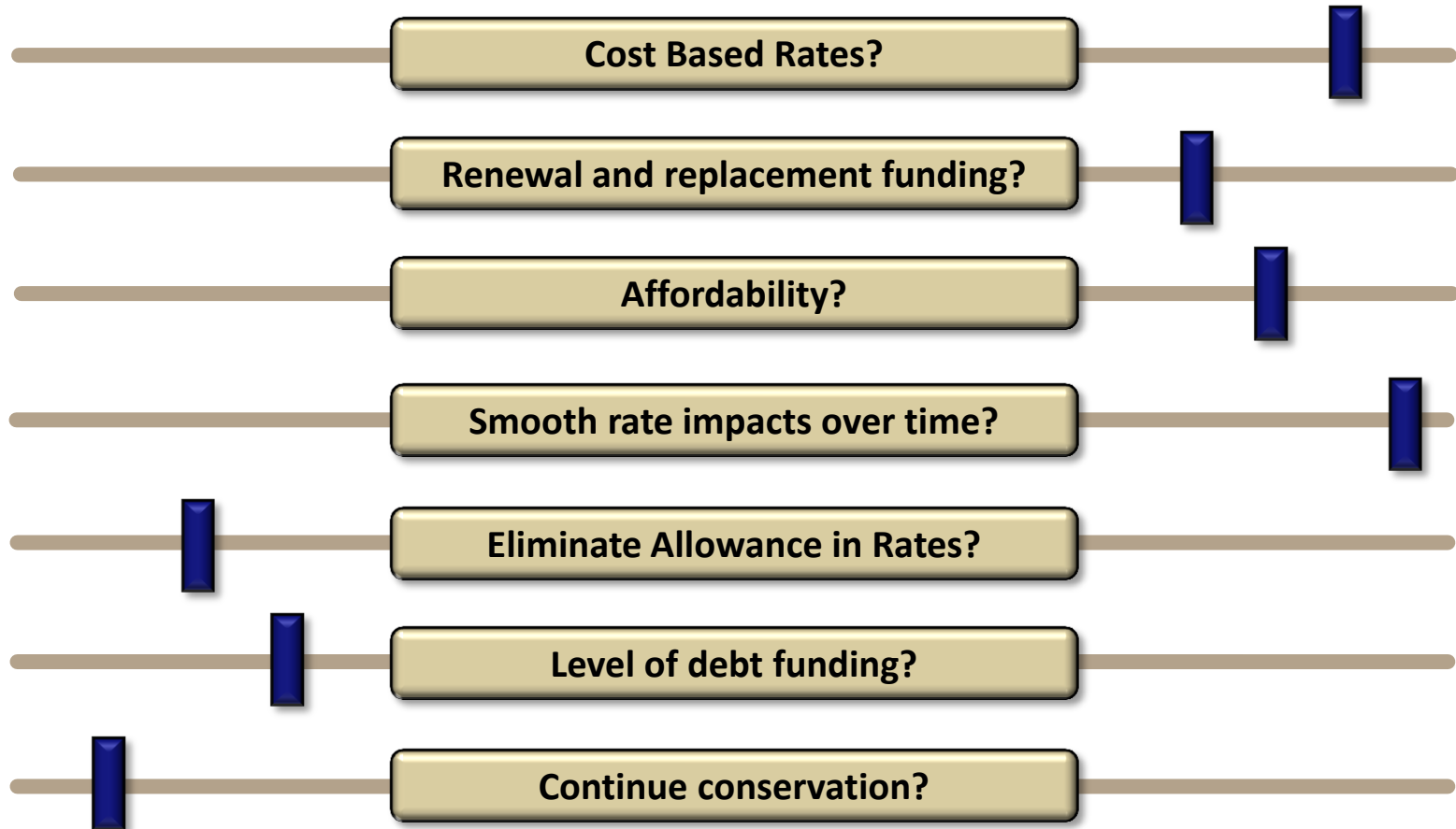
Your needs and objectives determine the steps to complete!



Establishing Sensitivities and Priorities

Less/No

More/Yes





Role of Financial Policies

- Basis for financial performance and budgeting
- Plan for weathering financial disruptions
- Foundation for consistent financial/rate decisions
- Documentation of management philosophy
 - To customers and outside financial community

Documentation of Policies Ideal



Example Fiscal Policies

	Purpose	Target
Operating Reserve	Liquidity cushion to accommodate cyclical cash flow fluctuations	Water = 90 Days O&M Sewer = 45 Days O&M Storm/Solid Waste = 30 Days O&M
Capital Contingency Reserve	To meet emergency repairs, unanticipated capital, and project cost overruns	1% - 2% of Original Cost Asset Values
Capital Replacement Funding	Promote ongoing system integrity through reinvestment in the system.	Annual Depreciation Expense; Annual Depreciation less debt principal
Debt Service Coverage	Compliance with existing loan/debt covenants and maintain credit worthiness for future debt issuance.	Target 2.0; Minimum Requirement 1.25



Role of a Revenue Requirement Analysis

- Multi-year financial plan
- Determines the amount of revenue necessary to meet all utility financial obligations
- Evaluates sufficiency of current rates on a stand-alone basis
- Develops annual rate implementation strategy



Revenue Requirement Elements

Fiscal Policy
Achievement



Forecast of
Revenue at
Existing Rates



Forecast of
O&M Costs

Planned
Capital Costs



Existing &
New Debt
Service



**Annual
Revenue
Requirement**



Revenue – Considerations

- Forecast of revenue generated by customer class
- Should consider 3-5 year historical revenue trends
- Include revenue from other operating fees/charges
- Do not include beginning balance
 - One time revenue that can mask rate evaluation



Two Key Cost Areas

Operations & Maintenance	Capital Infrastructure
<ul style="list-style-type: none">• Regular, ongoing activities• Highly time & schedule sensitive• Predicable, steady spending patterns• Predictable, regular funding source	<ul style="list-style-type: none">• Large, discrete projects• Limited time, schedule sensitivity• Long-term in nature• Inconsistent, varied spending patterns• Inconsistent, varied funding sources

Separating operating and capital activities facilitates more accurate forecasting



Operating Cost Considerations

- Historical cost review
- Inflation factors, CPI, CCI, labor contracts
- Strategic program initiatives
- Additional or enhanced needs (staffing, regulatory requirements)
- Increasing costs (purchases, materials, supplies, electricity)
- Indirect costs (overhead allocation up to date?)
- Review of excise tax calculation



Capital Cost Considerations

- Basis for costs is comprehensive plan or internally developed CIP
 - Costs escalated for inflation?
 - What is year of anticipated construction?
- Funding Sources – hierarchy of use
 - No cost resources first – grants/developer contributions
 - Existing revenue – connection/facility charges, rate funded capital, other transfer
 - Existing resources – cash balances
 - “Preferred” debt – low interest loans, G.O. Bonds
 - Traditional debt – revenue bonds



Capital Funding Impacts

Key Rate Components	
	Operating & Maintenance
+	Debt Service (existing & new)
+	Rate Funded Capital
=	Revenue Requirement
-	Miscellaneous Revenue
=	Revenue from Rates

Capital Funding	
	Total Capital Projects
-	Contributions (grant/developer)
-	Development Charges (SDC/GFC)
-	Rate Funded Capital
-	Cash Reserves
=	Debt Funding (loans/bonds)

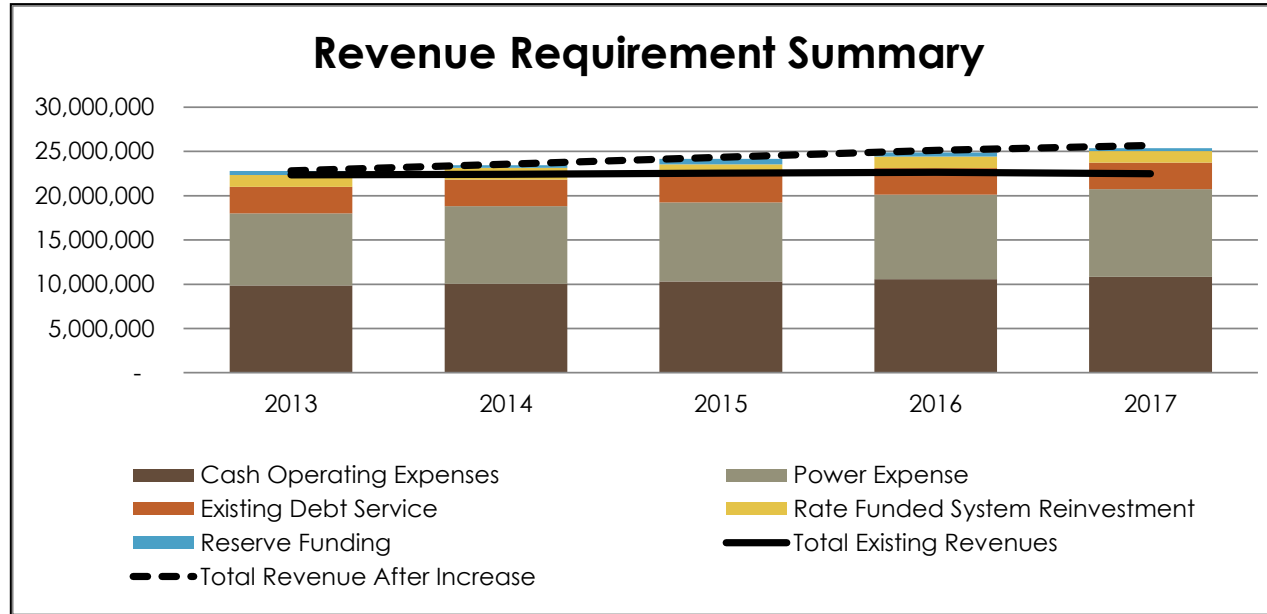


Capital Cost Considerations

- Funding Philosophy
 - Cash (pay-as-you-go)- Higher Near Term Rates
 - Existing customers pay 100% of initial costs
 - Debt Financing – Lowest near-term Rates
 - Mitigates immediate rate impacts of costly capital
 - More closely matches costs to useful life of asset
 - Spreads costs between existing and future ratepayers
 - Debt capacity may be an issue
 - Hybrid
 - Define a reasonable basis for cash/rate funding (R&R projects?)
 - Evaluate need for debt (large, long life projects)
 - Aligns funding with nature of capital project



Revenue Requirement = Overall Revenue Needs



- Identifies total financial obligations
- Evaluates sufficiency of existing rates
- Develops annual rate strategy

	2013	2014	2015	2016	2017
Rate Increases	4.50%	4.50%	3.25%	3.25%	3.25%



Cost of Service = Equity Evaluation

- Cost of service indicates how the rate adjustment will be equitably distributed among customer classes
- Cost allocations are based on
 - Industry Standard Methodologies
 - Unique usage characteristics (use and demands)
 - Unique facility requirements (planning and design criteria)

Class	Existing Revenue	2014 COSA	\$ Difference	% Difference
Single Family	\$ 3,740,000	\$ 4,014,516	\$ 274,516	7.3%
Multi-Family	1,700,000	1,893,800	193,800	11.4%
Commercial	1,360,000	1,571,684	211,684	15.6%
Total	\$ 6,800,000	\$ 7,480,000	\$ 680,000	10.0%



Rate Design = Revenue Collection

- Creation of rate structures that recover the target level of revenue
- Primary communication with customers
- Composed of fixed and/or variable charges
- Considerations:
 - Equity of rates
 - Complexity of rates (understandable & implementable)
 - Rate Impacts
 - Revenue stability and predictability
 - Social objectives (affordability, economic development, conservation, etc.)



Public Education/Communication

- Greater public scrutiny requires public **engagement, education** and **transparency**
- Multiple options available
 - Dedicated website
 - Open house
 - Rate committee
 - Bill calculators
 - Frequently asked questions
 - Newsletters
 - Bill stuffers/notices
 - Traveling public meetings
 - Radio/television interviews

City of Richland
Energy Services
Electric Retail Rate Design Calculator
Follow the instructions to the right.

Residential
Small General Medium General Large General
Small Industrial Large Industrial
Small Irrigation Large Irrigation

Disclaimer:
These draft electric retail rate options and calculator results are for discussion purposes only and have not been approved by the Richland City Council. The rate option calculator is for City of Richland Energy Services customers' use to review the draft electric retail rates and the estimated effects of the rate options on customers' bills. RES is making the calculator available so customers can provide input on the proposed rates. Calculated bills do not include 8.5% utility taxes. For questions about the calculator or its use, please contact Brian Booth at bbooth@ci.richland.wa.us or 509-942-7401 or Sandi Edgemon at sedoemon@ci.richland.wa.us or 509-942-7613.

FCS GROUP



Rate Study Discussion Topics

1. Beginning fund balance
2. Self supporting rates concept
3. Pay as you go capital funding
4. Fund balance assessment
5. Debt funding
6. Depreciation funding
7. Developing a rate strategy

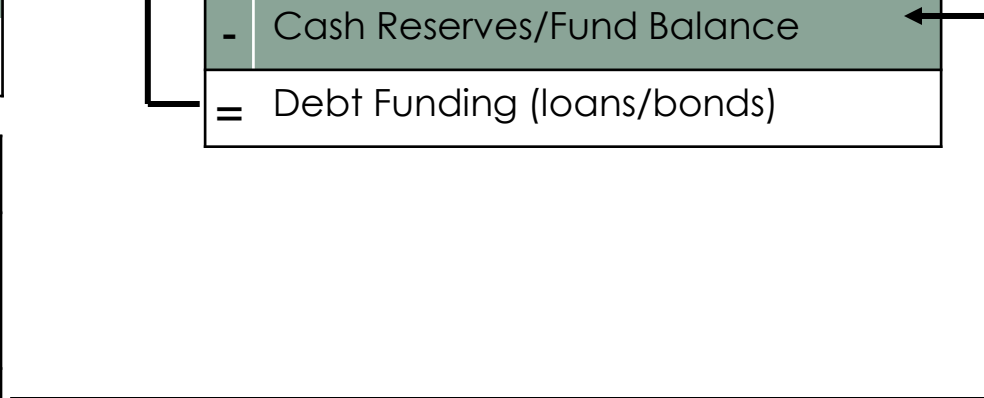
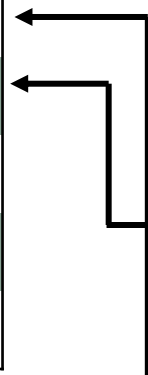
Overview of Rate Setting



Key Rate Components	
	Operating & Maintenance
+	Debt Service (existing & new)
+	Rate Funded Capital (routine)
=	Total Revenue Requirement
-	Miscellaneous Revenue
=	Revenue from Rates

Fund Balance	
	Beginning Balance
-	Target Balance (90 days O&M)
=	Available for Capital

Major Capital	
	Total Capital Projects
-	Contributions (grants/developer)
-	Development Charges (SDC/GFC)
-	Rate Funded Capital
-	Cash Reserves/Fund Balance
=	Debt Funding (loans/bonds)



All scenarios must satisfy cash flow needs, fund balance requirements and debt service coverage targets



Sample Utility Information

- ~ \$4.9 million in rate revenue
- ~\$4.6 million O&M
- ~ \$900K annual debt service
- \$0 dedicated rate funded capital
- \$3.0 million in fund balance
- 90 Day O&M fund balance target
 - (\$1.1 -\$1.3 million)

Description	Budget
Investment Interest	91,600
Misc Transfers	335,200
Capital Projects	1,448,000
Trf related to CIP	82,100
Retail Sales	4,982,588
Investment Interest	76,800
Delinquent Interest	11,000
Sale of Scrap & Junk	1,000
Judgments & Settlements	1,000
Debt Service Transfers	38,800
Misc Transfers	335,200
Part Time Employees	31,200
Overtime/Call-Back Pay	42,000
Full Time Employees	768,900
Supplemental Life	1,200
State Unemployment	2,400
LTD	3,200
Workers Comp	27,000
Retirement - PERS	60,200
FICA	63,000
Ins - Medical/Dental	196,900
Comp Equip Under \$7500	7,500
Office/Operating Supplies	24,900
Chemicals	70,500
Bldg & Maint Supplies	71,600
Diesel Fuel	3,500
Fuel Consumed	28,000
Materials-Job Cost	77,000
Small Tools/Minor Equip	26,000
Professional/Contract Svc	88,200
IT Charges	231,400
PW Administrative Chgs	374,800
Administrative Charges	639,900

General Rate Review Approach

Revenue Requirement	2014	2015	2016	2017	2018	2019
Revenues						
Beginning Balance	\$ 5,264,000	\$ 4,760,000	\$ 4,486,000	\$ 3,024,000	\$ 1,109,000	\$ (34,000)
Rate Revenues Under Existing Rates	4,983,000	4,997,000	5,012,000	5,026,000	5,040,000	5,055,000
Non-Rate Revenues	<u>492,000</u>	<u>508,000</u>	<u>446,000</u>	<u>399,000</u>	<u>412,000</u>	<u>427,000</u>
Total Revenues	\$10,739,000	\$10,265,000	\$ 9,944,000	\$ 8,449,000	\$ 6,561,000	\$ 5,448,000
Expenses						
Cash Operating Expenses	\$ 4,651,000	\$ 4,772,000	\$ 4,897,000	\$ 5,026,000	\$ 5,159,000	\$ 5,296,000
Existing Debt Service	967,000	907,000	887,000	884,000	880,000	846,000
New Debt Service	-	-	-	-	-	-
Rate Funded Capital	<u>361,000</u>	<u>100,000</u>	<u>1,136,000</u>	<u>1,430,000</u>	<u>556,000</u>	<u>610,000</u>
Total Expenses	\$ 5,979,000	\$ 5,779,000	\$ 6,920,000	\$ 7,340,000	\$ 6,595,000	\$ 6,752,000
Net Surplus (Deficiency)	\$ 4,760,000	\$ 4,486,000	\$ 3,024,000	\$ 1,109,000	\$ (34,000)	\$ (1,304,000)
Additions to Meet Coverage	-	-	-	-	-	-
Total Surplus (Deficiency)	\$ 4,760,000	\$ 4,486,000	\$ 3,024,000	\$ 1,109,000	\$ (34,000)	\$ (1,304,000)
% Rate Increase Required	0.00%	0.00%	0.00%	0.00%	0.67%	25.80%



General Rate Review Observations

Revenue Requirement	2014	2015	2016	2017	2018	2019
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- Including beginning fund balance in rate evaluation can mask needed rate revenue
- Example shows no rate increase needed until 2018 when fund balance depleted



General Rate Review Observations

(cont.)

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% Rate Increase Required	0.00%	0.00%	0.00%	0.00%	0.67%	25.80%

- Capital needs not consistent year to year
- Ideally should smooth annual capital funding if possible so rates are not volatile from year to year



General Rate Review Observations

(cont.)

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Capital needs not consistent
year to year

- Fund balance depleted (target is \$1.1 - \$1.3 million)



General Rate Review Observations

(cont.)

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% Rate Increase Required	0.00%	0.00%	0.00%	0.00%	0.67%	25.80%

Capital needs not consistent year to year

Fund balance depleted

- Rate increases needed in 2018/2019
- Wait until 2018/2019 or begin proactively funding needs slowly now?



Revised Rate Assessment

(self supporting rates concept)

Revenue Requirement	2014	2015	2016	2017	2018	2019
Revenues						
Rate Revenues Under Existing Rates	\$ 4,983,000	\$ 4,997,000	\$ 5,012,000	\$ 5,026,000	\$ 5,040,000	\$ 5,055,000
Non-Rate Revenues	492,000	509,000	447,000	403,000	418,000	433,000
Total Revenues	\$ 5,475,000	\$ 5,506,000	\$ 5,459,000	\$ 5,429,000	\$ 5,458,000	\$ 5,488,000
Expenses						
Cash Operating Expenses	\$ 4,657,000	\$ 4,778,000	\$ 4,902,000	\$ 5,031,000	\$ 5,164,000	\$ 5,302,000
Existing Debt Service	967,000	907,000	887,000	884,000	880,000	846,000
New Debt Service	-	-	-	-	-	-
Rate Funded Capital	-	-	-	-	-	-
Total Expenses	\$ 5,624,000	\$ 5,685,000	\$ 5,789,000	\$ 5,915,000	\$ 6,044,000	\$ 6,148,000
Total Surplus (Deficiency)	\$ (149,000)	\$ (179,000)	\$ (330,000)	\$ (486,000)	\$ (586,000)	\$ (660,000)
% of Rate Revenue	2.99%	3.58%	6.58%	9.67%	11.63%	13.06%

When recurring revenue evaluated alone – rate increases needed

- Fund balance is a one time revenue source – should not be included in initial rate evaluation
 - Can be used to phase-in rate increases
- Evaluate rate sufficiency to cover existing operating needs first (O&M, taxes, existing debt service)
- Now add capital.....



Rate Assessment w/Capital

(Pay as you go)

Revenue Requirement	2014	2015	2016	2017	2018	2019
Revenues						
Rate Revenues Under Existing Rates	\$ 4,983,000	\$ 4,997,000	\$ 5,012,000	\$ 5,026,000	\$ 5,040,000	\$ 5,055,000
Non-Rate Revenues	492,000	507,000	445,000	397,000	412,000	427,000
Total Revenues	\$ 5,475,000	\$ 5,504,000	\$ 5,457,000	\$ 5,423,000	\$ 5,452,000	\$ 5,482,000
Expenses						
Cash Operating Expenses	\$ 4,651,000	\$ 4,772,000	\$ 4,897,000	\$ 5,026,000	\$ 5,159,000	\$ 5,296,000
Existing Debt Service	967,000	907,000	887,000	884,000	880,000	846,000
New Debt Service	-	-	-	-	-	-
Rate Funded Capital	361,000	100,000	1,136,000	1,430,000	556,000	610,000
Total Expenses	\$ 5,979,000	\$ 5,779,000	\$ 6,920,000	\$ 7,340,000	\$ 6,595,000	\$ 6,752,000
Total Surplus (Deficiency)	\$ (504,000)	\$ (275,000)	\$ (1,463,000)	\$ (1,917,000)	\$ (1,143,000)	\$ (1,270,000)
% of Rate Revenue	10.11%	5.50%	29.19%	38.14%	22.68%	25.12%

Rate funding capital can cause peaks and valleys in rates

- Some entities want to cash/rate fund needs – no debt
- Fund balances should take capital funding volatility not rates
- Capital funding should be smoothed annually with other funding sources available

Capital Project Planning

No	Description	TOTAL COSTS	2014	2015	2016	2017	2018	2019
5	Project 1	-	-	-	-	-	-	-
6	Project 2	-	-	-	-	-	-	-
7	Project 3	918,000	306,000	-	306,000	-	306,000	-
8	Project 4	380,000	-	50,000	330,000	-	-	-
9	Project 5	400,000	-	50,000	350,000	-	-	-
10	Project 6	550,000	-	-	50,000	500,000	-	-
11	Project 7	990,000	-	-	100,000	890,000	-	-
12	Project 8	290,000	-	-	-	40,000	250,000	-
13	Project 9	400,000	-	-	-	-	-	400,000
14	Project 10	210,000	-	-	-	-	-	210,000
18	Project 11	55,000	55,000	-	-	-	-	-
19		-	-	-	-	-	-	-
Total Capital Projects		\$4,193,000	\$ 361,000	\$ 100,000	\$1,136,000	\$1,430,000	\$ 556,000	\$ 610,000

- Need to identify annual capital needs
- Are costs escalated? Escalate to year of construction
- Need ability to change project schedule
- Identify funding source ideal



Fund Balance Assessment

Fund Balance	2014	2015	2016	2017	2018	2019
Beginning Balance	\$ 3,000,000	\$ 2,667,000	\$ 2,563,168	\$ 1,272,075	\$ (473,244)	\$ (1,448,744)
plus: Net Cash Flow	(149,000)	(180,000)	(331,000)	(488,000)	(589,000)	(665,000)
plus: Rate Funded Capital	-	-	-	-	-	-
plus: System Development Charges	169,500	169,500	169,500	169,500	169,500	169,500
plus: Revenue Bond Proceeds	-	-	-	-	-	-
plus: PWTF Loans	-	-	-	-	-	-
plus: Interest Earnings	7,500	6,668	6,408	3,180	-	-
Total Funding Sources	\$ 3,028,000	\$ 2,663,168	\$ 2,408,075	\$ 956,756	\$ (892,744)	\$ (1,944,244)
less: Capital Expenditures	(361,000)	(100,000)	(1,136,000)	(1,430,000)	(556,000)	(610,000)
Ending Capital Fund Balance	\$ 2,667,000	\$ 2,563,168	\$ 1,272,075	\$ (473,244)	\$ (1,448,744)	\$ (2,554,244)
<i>Minimum Target Balance (90 days O&M)</i>	\$ 1,148,301	\$ 1,178,137	\$ 1,208,712	\$ 1,240,521	\$ 1,273,315	\$ 1,307,342
<i>Days</i>	209	257	130	(35)	(145)	(263)

Rate deficiency

Capital costs

Fund balances depleted and below targets, **other funding sources needed**

- Separate but related to rate revenue evaluation
- Fund must cover any annual rate deficiency and capital needs
- Separate operating and capital fund balance ideal
- Include all funding sources available
- Are fund balance targets met?

Debt Funding

Fund Balance	2014	2015	2016	2017	2018	2019
Beginning Balance	\$ 3,000,000	\$ 2,813,999	\$ 3,010,724	\$ 2,178,512	\$ 1,766,705	\$ 1,521,660
plus: Net Cash Flow	(2,002)	120,190	126,761	68,248	137,038	237,734
plus: Rate Funded Capital	-	-	-	-	-	-
plus: System Development Charges	169,500	169,500	169,500	169,500	169,500	169,500
plus: Revenue Bond Proceeds	-	-	-	775,000	-	-
plus: PWTF Loans	-	-	-	-	-	-
plus: Interest Earnings	7,500	7,035	7,527	5,446	4,417	3,804
Total Funding Sources	\$ 3,174,999	\$ 3,110,724	\$ 3,314,512	\$ 3,196,705	\$ 2,077,660	\$ 1,932,699
less: Capital Expenditures	(361,000)	(100,000)	(1,136,000)	(1,430,000)	(556,000)	(610,000)
Ending Fund Balance	\$ 2,813,999	\$ 3,010,724	\$ 2,178,512	\$ 1,766,705	\$ 1,521,660	\$ 1,322,699
<i>Minimum Target Balance (90 days O&M)</i>	<i>\$ 1,148,301</i>	<i>\$ 1,178,137</i>	<i>\$ 1,208,712</i>	<i>\$ 1,240,521</i>	<i>\$ 1,273,315</i>	<i>\$ 1,307,342</i>
<i>Days</i>	<i>221</i>	<i>230</i>	<i>162</i>	<i>128</i>	<i>108</i>	<i>91</i>

New debt needed; Results in new debt service payment; need to understand coverage requirements

Revenue Requirement	2014	2015	2016	2017	2018	2019
Revenues						
Rate Revenues Under Existing Rate:	\$ 4,983,000	\$ 4,997,000	\$ 5,012,000	\$ 5,026,000	\$ 5,040,000	\$ 5,055,000
Non-Rate Revenues	492,000	509,000	447,000	403,000	418,000	433,000
Total Revenues	\$ 5,475,000	\$ 5,506,000	\$ 5,459,000	\$ 5,429,000	\$ 5,458,000	\$ 5,488,000
Expenses						
Cash Operating Expenses	\$ 4,657,000	\$ 4,778,000	\$ 4,902,000	\$ 5,031,000	\$ 5,164,000	\$ 5,302,000
Existing Debt Service	967,000	907,000	887,000	884,000	880,000	846,000
New Debt Service	-	-	-	66,000	66,000	66,000
Rate Funded Capital	-	-	-	-	-	-
Total Expenses	\$ 5,624,000	\$ 5,685,000	\$ 5,789,000	\$ 5,981,000	\$ 6,110,000	\$ 6,214,000
Total Surplus (Deficiency)	\$ (149,000)	\$ (179,000)	\$ (330,000)	\$ (552,000)	\$ (652,000)	\$ (726,000)
% of Rate Revenue	2.99%	3.58%	6.58%	10.98%	12.94%	14.36%

100% Depreciation Funding

Revenue Requirement	2014	2015	2016	2017	2018	2019
Revenues						
Rate Revenues Under Existing Rate: \$	4,983,000	\$ 4,997,000	\$ 5,012,000	\$ 5,026,000	\$ 5,040,000	\$ 5,055,000
Non-Rate Revenues	492,000	505,000	441,000	397,000	412,000	427,000
Total Revenues	\$ 5,475,000	\$ 5,502,000	\$ 5,453,000	\$ 5,423,000	\$ 5,452,000	\$ 5,482,000
Expenses						
Cash Operating Expenses	\$ 4,657,000	\$ 4,778,000	\$ 4,902,000	\$ 5,031,000	\$ 5,164,000	\$ 5,302,000
Existing Debt Service	967,000	907,000	887,000	884,000	880,000	846,000
New Debt Service	-	-	-	-	-	-
Rate Funded Capital	1,396,000	1,398,000	1,421,000	1,449,000	1,460,000	1,473,000
Total Expenses	\$ 7,020,000	\$ 7,083,000	\$ 7,210,000	\$ 7,364,000	\$ 7,504,000	\$ 7,621,000
Total Surplus (Deficiency)	\$ (1,545,000)	\$ (1,581,000)	\$ (1,757,000)	\$ (1,941,000)	\$ (2,052,000)	\$ (2,139,000)
% of Rate Revenue	31.01%	31.64%	35.06%	38.62%	40.71%	42.31%

- Rate funded capital equal to depreciation expense
 - Reduces need for debt
 - Accumulates cash for future capital needs
 - May result in large rate impacts

Depreciation Funding – Phase In

Revenue Requirement	2014	2015	2016	2017	2018	2019
Revenues						
Rate Revenues Under Existing Rate: \$	4,983,000	\$ 4,997,000	\$ 5,012,000	\$ 5,026,000	\$ 5,040,000	\$ 5,055,000
Non-Rate Revenues	492,000	509,000	447,000	403,000	418,000	433,000
Total Revenues	\$ 5,475,000	\$ 5,506,000	\$ 5,459,000	\$ 5,429,000	\$ 5,458,000	\$ 5,488,000
Expenses						
Cash Operating Expenses	\$ 4,657,000	\$ 4,778,000	\$ 4,902,000	\$ 5,031,000	\$ 5,164,000	\$ 5,302,000
Existing Debt Service	967,000	907,000	887,000	884,000	880,000	846,000
New Debt Service	-	-	-	-	-	-
Rate Funded Capital	250,000	500,000	750,000	1,000,000	1,250,000	1,500,000
Total Expenses	\$ 5,874,000	\$ 6,185,000	\$ 6,539,000	\$ 6,915,000	\$ 7,294,000	\$ 7,648,000
Total Surplus (Deficiency)	\$ (399,000)	\$ (679,000)	\$ (1,080,000)	\$ (1,486,000)	\$ (1,836,000)	\$ (2,160,000)
% of Rate Revenue	8.01%	13.59%	21.55%	29.57%	36.43%	42.73%

- Rate funded capital target depreciation over time
 - Reduces need for debt
 - Accumulates cash for future capital needs
 - Moderates rate impacts

Rate Strategy Options

Revenue Requirement	2014	2015	2016	2017	2018	2019
% of Rate Increase Needed	2.99%	3.60%	6.60%	18.42%	20.38%	21.84%

RATE INCREASES AS NEEDED

Annual Rate Adjustment	2.08%	0.58%	2.89%	11.08%	1.61%	1.17%
Cumulative Annual Rate Adjustment	2.99%	3.59%	6.58%	18.39%	20.29%	21.70%
Sample Residential Mo Bill w/Incr.	\$ 36.86	\$ 37.07	\$ 38.15	\$ 42.37	\$ 43.06	\$ 43.56
Monthly Average Increase (\$)	\$ 0.75	\$ 0.21	\$ 1.07	\$ 4.23	\$ 0.68	\$ 0.50

RATE INCREASES SMOOTHED

Annual Rate Adjustment	4.00%	4.00%	4.00%	4.00%	2.00%	1.00%
Cumulative Annual Rate Adjustment	4.93%	9.12%	13.49%	18.03%	20.39%	21.59%
Sample Residential Mo Bill w/Incr.	\$ 37.55	\$ 39.06	\$ 40.62	\$ 42.24	\$ 43.09	\$ 43.52
Monthly Average Increase (\$)	\$ 1.44	\$ 1.50	\$ 1.56	\$ 1.62	\$ 0.84	\$ 0.43

RATE INCREASES EVERY OTHER YEAR

Annual Rate Adjustment	6.75%	0.00%	6.75%	0.00%	6.75%	0.00%
Cumulative Annual Rate Adjustment	6.75%	6.75%	13.96%	13.96%	21.65%	21.65%
Sample Residential Mo Bill w/Incr.	\$ 38.55	\$ 38.55	\$ 41.15	\$ 41.15	\$ 43.93	\$ 43.93
Monthly Average Increase (\$)	\$ 2.44	\$ -	\$ 2.60	\$ -	\$ 2.78	\$ -



Wrap Up / Questions

- Rate study steps depend on what you are trying to answer
- Understanding your sensitivities, priorities and objectives will help focus the analysis
- Having a representative from key departments improves results
- Rate study provides a financial planning tool that is vital for prudent fiscal management and fiscal sustainability